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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,828	10/01/2003	Steven W. Havens	65266-003	8799

7590 08/03/2005  
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EXAMINER

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/674,828

Applicant(s)

HAVENS, STEVEN W.

Examiner

Michael P. Nghiem

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.  
4a) Of the above claim(s) 27-36 and 38-41 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4, 7-14, 18-21, 26 and 37 is/are rejected.  
7) ☒ Claim(s) 5, 6, 15-17 and 22-25 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

Claims 27-36 and 38-41 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 5, 2005.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7-14, 18-21, 26, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al. (US 6,455,319).

Regarding claim 1, Lewis et al. discloses a method (Fig. 1) for correlating raw transducer data in a system of transducers (array of sensors 110) comprising the steps of:

- communicating transducer data in a common format (measuring response from sensors, Abstract, lines 7-8);
- characterizing the transducer data and relationships between transducers in a common format (Abstract, lines 8-10);
- defining interdependencies of transducers (column 3, line 65 – column 4, line 3) for modeling a system (column 3, lines 63-65);
- time correlating the data from the various transducers (column 2, lines 63-66).

Regarding claim 2, Lewis et al. discloses the step of communicating the transducer in a common format (column 2, lines 58-63).

Regarding claim 3, Lewis et al. discloses that the transducer data produces measurements of physical parameters (detection of an analyte from sensors, column 3, lines 43-44).

Regarding claim 4, Lewis et al. discloses measurements comprise samples of one or more physical parameters (responses from sensors, column 3, line 44).

Regarding claim 7, Lewis et al. discloses that the data is communicated in clusters (Fig. 1).

Regarding claim 8, Lewis et al. discloses that the clusters have time tags (column 2, lines 63-66).

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Regarding claim 9, Lewis et al. discloses that the time tag is representative of the state of a system clock at the time of the first sample of the cluster (time tagging data).

Regarding claim 10, Lewis et al. discloses that the data is communicated in a transducer markup language (sensor response).

Regarding claim 11, Lewis et al. discloses that the transducer data is communicated without loss of fidelity (loss of fidelity is not mentioned in reference).

Regarding claim 12, Lewis et al. discloses that the basis of the common format is a transducer characteristic frame (Fig. 1).

Regarding claim 13, Lewis et al. discloses that the transducer characteristic frame has a dimension of at least 0, 1, 2, 3, or greater (dimension of array, Fig. 1).

Regarding claim 14, Lewis et al. discloses that the common characterization expresses spatial, or temporal, or other relations between samples using a common transducer characteristic frame (Abstract, line 9).

Regarding claim 18, Lewis et al. discloses using a transducer to model time varying properties of another transducer (column 2, lines 60-63).

Regarding claim 19, Lewis et al. discloses that the step of specifying interdependencies between transducers as at least one of attached; dangling; position; and attitude; and derivatives thereof (spatio profile, column 2, line 60-61).

Regarding claim 20, Lewis et al. discloses that the step of adding any number of additional transducers to the system and following the previously recited steps (include second sensor to first sensor, column 2, line 63).

Regarding claim 21, Lewis et al. discloses calculating a specific time tag using a temporal transducer characteristic frame model (column 2, lines 63-66).

Regarding claim 26, Lewis et al. discloses storing the correlated transducer data for retrieval and processing at a time after correlation (via 180, Fig. 1).

Regarding claim 37, Lewis et al. discloses display means for displaying selectable portions of the transducer data (Fig. 4's).

***Allowable Subject Matter***

Claims 5, 6, 15-17, and 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Reasons For Allowance***

The **combination** as claimed wherein one or more samples comprise a transducer characteristic frames (claim 5) or N spatial coordinates of each sample are expressed in a transducer characteristic frame (claim 15) or expressing arbitrary properties and characteristics of transducers in a transducer characteristic frame (claim 17) or calculating transducer time varying properties by interpolating values from other transducers using the specific time tag (claim 22) or calculating external orientation of any transducer sample to a specified external reference system (claim 23) is not disclosed, suggested, or made obvious by the prior art of record.

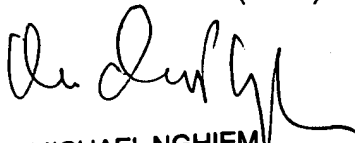
***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-H.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8000.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL NGHIEM  
PRIMARY EXAMINER

Michael Nghiem

August 2, 2005